

Abstract

A gas/liquid pump moves liquid by passing gas up through it. Pumping is accomplished by the liquid's moving through three conduits. The first, a collector conduit, transports the liquid to the bottom of the unit. The second, a gas-lift conduit, mixes the liquid and gas at the bottom and transports the mixture upwards, owing to the rising action of the bubbles and the resulting decreased density of the gas/liquid mixture. At the top of the gas-lift conduit, some of the gas escapes from the liquid and out of the unit. The lifted liquid then returns to near its original density and exits the unit through the down and out conduit.